WO 2004/063633 PCT/KR2004/000040

## Claims:

5

10

1. A radiating pipe that includes a certain shaped pipe body, and a heat wire passing through the interior of the pipe body wherein both ends of the pipe body are sealed by a plugging cap, an electric radiating pipe, comprising:

a porous inflammable operation medium and volatile operation fluid being mixed and being filled into the interior of the pipe body.

- 2. The pipe of claim 1, wherein said operation medium has a size of 1~3mm and is formed in a circular shape or an elliptical shape or a polygonal shape.
  - 3. The pipe of claim 2, wherein said operation medium is selected from the group comprising yellow earth grains, charcoal, gravel, and zeolite.
- 15 4. The pipe of claim 1, wherein said operation medium is selected from an inflammable fabric group such as porous cotton, non-woven fabric, cotton, rope, etc.
- 5. The pipe of claim 4, wherein said operation fluid has 20~80% air volume ratio with respect to the air volume of the operation medium.

WO 2004/063633 PCT/KR2004/000040

6. An electric mat that includes an adiabatic member installed on the floor, a certain shaped pipe body, a plugging cap sealing both ends of the pipe body, a radiating pipe inserted into the pipe body and having a heat wire capable of generating heat when power is supplied, an electric plate installed in an upper side of the radiating pipe, and a finishing material layer installed in an upper side of the electric plate, an electric mat, comprising:

a porous inflammable operation medium and a volatile operation fluid being mixed and inserted into the interior of the radiating pipe.

10

15

5

- 7. The mat of claim 6, wherein said operation medium is selected from the group comprising yellow earth grains, charcoal, gravel, zeolite, porous cotton, non-woven fabric, cotton and rope.
- 8. An electric radiator that includes a radiating pipe formed of a certain shaped pipe body, a heat wire installed in the radiating pipe and generating heat when power is supplied, and a plurality of radiating plates installed vertically with respect to the radiating pipe and generating heat of the radiating pipe, an electric radiator, comprising:
- a porous inflammable operation medium and a volatile operation fluid

being mixed and inserted into the interior of the radiating pipe.

9. The radiator of claim 8, wherein said operation medium is selected from the group comprising yellow earth grains, charcoal, gravel, zeolite, porous cotton, non-woven fabric, cotton and rope.

10

5

15

20